Business Implementation Plan

TINA project

Presentation to NITC

November, 2000

EXECUTIVE SUMMARY

On April 20, 2000 the Telecommunications Infrastructure Needs Assessment (TINA) Advisory Committee made a recommendation to the Nebraska Information Technology Commission that the State should move forward on pursuing a "prime contractor" alternative for implementation of a statewide telecommunications network. The NITC endorsed this recommendation and the TINA Advisory Committee committed to returning with a business implementation plan prior to moving forward. This document is that business implementation plan.

The target market for this type of network is Nebraska's K-12 and post-secondary institutions, libraries and local, state, tribal and federal government entities. Combined, these entities are currently the larges consumer of high-bandwidth network services in the State. Combined as a unit, this group has phenomenal purchasing power. The process being proposed does not take the approach of the State owning or building any of the needed infrastructure. Rather the State will take a role of anchor tenant in communities to "jump start" advanced services being offered in the communities. In order for this project to be successful, there are three keys to success:

- Collaboration and cooperation among the community served.
- Strategic partnerships with and among telecommunications providers, network providers, and hardware and software vendors.
- Leveraging of the combined purchasing power of the network community

This business implementation plan identifies the benefits and risks of implementing a prime contractor model. Each risk is presented with a plan to minimize the risk that has been identified. However, even with the possible inherent risks, it is anticipated that the resulting contract from this process will lower rates for telecommunications services at the State enterprise level.

The next steps for this process include the development of a Request for Proposal (RFP) to bid the aggregated network. The milestones identified indicate that an RFP will be issued in April, 2001 with announcement of selection in August, 2001. Negotiations with the prime are scheduled to be finalized in October, 2001 and initial implementation of the network beginning in December, 2001.

SCOPE

On April 20, 2000, the Telecommunications Infrastructure Needs Assessment (TINA) Advisory Committee made a recommendation to the Nebraska Information Technology Commission that the State should move forward on pursuing a "prime contractor" alternative for implementation of a statewide telecommunications network.

The prime contractor concept was defined as the State contracting to lease services under a competitive procurement from a single statewide prime telecommunications service provider. This service provider would offer telecommunications services (i.e.; voice, data, video distribution, video conferencing, distance learning and Internet access) to all levels of state and local government, including K-12, post-secondary and higher education. Service Level Agreements (SLA) and performance parameters such as Quality of Service (QoS), circuit availability, and lead times for service implementation, among others, would be defined. The prime contractor will be expected to provide end-to-end services through subcontracting or joint ventures with the incumbent local exchange carriers (ILEC), competitive local exchange carriers (CLEC), Interexchange carriers (IXC), and any other telecommunications service providers as allowed by law. These services will be offered at a uniform postalized rate, with the prime contractor having the responsibility for averaging costs among its subcontractors/partners.

This scenario enables the local exchange carriers (LEC), Interexchange carriers (IXC), Internet service providers (ISP), as well as other telecommunications providers the opportunity to provision for the full range of needed services and be capable of offering services locally to the residents and business interests in each community.

The TINA Advisory Committee committed to assisting with the implementation of this plan. This commitment involved the continued monitoring of the process to implement this plan with periodic analysis of direction and monitoring of the process to ensure the continued integrity of the State network.

The NITC endorsed this recommendation and the TINA Advisory Committee committed to returning with a Business Plan for implementation prior to moving forward. This document is that business implementation plan.

THE ENVIRONMENT

Users of today’s network services are redefining networking and telecommunications. The users are creating a demand on the network that is far greater than the capacity to serve the demand. They anticipate the seamless integration of data and voice in some instances. They expect security and guaranteed service. The ability to reconfigure a network to adapt to new requirements is a key feature requested of any new network. Users are watching the development of many advanced technologies being introduced in various arenas. History shows that as these new technologies evolve, they

become part of the standard services expected by all consumers. This means that the traditional models for statewide networking are changing. Networks must be designed that are flexible, scaleable, reliable, ubiquitous, high-speed and affordable.

The target market for this type of network is Nebraska's K-12 and post-secondary institutions, libraries and local, state, tribal and federal government entities. Combined, these entities are currently the largest consumer of high-bandwidth network services in the state. This also means they currently have the greatest costs. Combined as a unit, this group has phenomenal purchasing power.

This process has always kept in mind the issue of serving the local communities. The Digital Divide network states that "There has always been a gap between those people and communities who can make effective use of information technology and those who cannot. Now, more than ever, unequal adoption of technology excludes many from reaping the fruits of the economy. We use the term "digital divide" to refer to this gap between those who can effectively use new information and communication tools, such as the Internet, and those who cannot. While a consensus does not exist on the extent of the divide (and whether the divide is growing or narrowing), researchers are nearly unanimous in acknowledging that some sort of divide exists at this point in time."[1] The process being recommended does not take the approach of the State owning or building any of the infrastructure. But rather the State will take a role of anchor tenant in communities to "jump start" advanced services being offered to the communities.

In order for this project to be successful, there are three keys to success:

- Collaboration and cooperation among the community served.
- Strategic partnerships with and among telecommunications providers, network providers, and hardware and software vendors.
- Leveraging of the combined purchasing power of the network community.

ORGANIZATIONAL PLAN

In this strategy, the state would contract to lease services under a competitive procurement from a statewide prime telecommunications service contractor. The prime contractor would offer services to the target market above. The RFP that will be issued will estimate the offered traffic at each service node or site over a three to five year planning window. The selected contractor will design, implement, operate and maintain the network proposed to provide the required services to the target market. The State would not own facilities, but would expect the service providers to install and operate the necessary equipment at their own facilities. This scenario enables the local exchange companies, inter-exchange companies and other service providers to provision for the full range of needed services and be capable of offering services locally to the residents and business interests in each community.

The prime contractor will assume complete responsibility for all aspects of the program, including furnishing all facilities for the State's network services, local access

facilities, a state Network Operation Center capability to be placed at the State, and serve as the State's single point of contact in all contractual and operational matters. The prime contractor will be expected to subcontract or joint venture with incumbent local exchange carriers, competitive local exchange carriers, inter-exchange companies, and other service providers as part of its team as it deems competitively necessary. As a function of this project, the RFP will ask that current contracts held by the prime contractor, or any subcontractors to the project, will be absorbed into the network project.

COST CONSIDERATIONS

The prime contractor strategy stipulates a single vendor will be selected as a result of a competitive procurement process. The vendor reaction to this strategy, as applied or introduced in several other states, has shown high interest and a highly competitive bidding process. It is expected that the bidders in Nebraska will be equally aggressive and offer services at substantial discounts.

A second cost consideration is the savings that should be realized resulting from shared and more efficient use of resources between entities involved in this process.

Finally, the use of postalized rates will spread costs of services to Nebraskan's throughout the system, removing cost disincentives to bringing e-government and e-commerce services to rural areas.

RISKS

This process also assumes some risks.

Risk of non-performance by the prime contractor after contract award. In the event of non-performance of a single prime contractor, alternative service providers may be more difficult or costly to find on short notice. To shield against this risk, the contracts with the prime contractor will need to address penalty clauses with monetary relief to assure that the parties to the contract receive the appropriate levels of service. This monetary relief should be set at a level that would compensate the user if alternative service is more costly.

Risk of non-participation by target market of customers. Much of the customer market consists of independent units of government. If many choose not to participate, expected revenues may not materialize for the vendor. There will be entities in the communities that may not want to upgrade or do not wish to obtain new technology, either because of funding problems or lack of knowledge. There is a risk that must be considered regarding being "everything to everybody". This is a real risk that can hamper design, development, planning, implementation, and ultimately, the success/failure of the project. To shield against this risk, the bids resulting from the RFP will be reviewed by a multi-agency, multi-jurisdictional work group representing various communities of interest. The award will be made based on criteria that identifies implementation of advanced services, consolidation of current services, and dollars

savings. These factors ultimately will provide a solid foundation for a sound business decision by the target market participating in the project. The project will identify a catalog of services that are available to participants to create a clear understanding of what is available in the contract.

There may be specific instances where existing members of the network community will incur "higher costs" to participate in the network than they currently pay. A postalized rate, could actually raise costs in some areas. Funding for these additional costs may need to be looked at on an enterprise level. To shield against this risk, policy issues related to the funding of participation on an enterprise level will need to be reviewed by the NITC and the Legislature.

There may be a possibility that no entity will bid as Prime Contractor. Although highly unlikely, it could happen. To shield against this risk, the current network information that will be included in the bid will be posted to a public web site accessible by anyone, including potential bidders. The TINA project continues to be a very public process.

There may be a possibility that bids received will not be acceptable—either due to affordability, performance criteria, design specificity, or others. To shield against this risk, the RFP will outline the specific technical requirements and management in order to guard against potential design and performance flaws. Additionally the contract will allow the State to make decisions regarding penalties for missed milestones and deadlines. Clauses will be included to allow for cancellation of the contract in the event of total non-performance. Affordability issues may pose a potential risk that is impossible to shield against.

By attempting to do too much, the result could be mediocrity. To shield against this risk, the scope of this project has been approached in a manner that identifies specific components of the project, rather than taking on all issues at once. The project has initially been designed to deal with technology transport issues only. A well-planned, phased-in implementation with specific milestones and measurements may result in a well-defined and successful operational network for the long term.

Hidden or unknown financial/cost issues that might arise. Historically, there normally are certain financial obligations that arise for some entity within the network community that may require intervention by some "fund-approving body". For example, a change in the network may require a customer to add equipment not previously needed. To shield against this risk, it is anticipated that this project will be implemented in phases to allow sufficient time for inclusion into the normal budgeting period any requests for additional funding.

As with any bid process, there is the possibility of litigation resulting from the awarding of the contract to the Prime. To shield against this risk, the Advisory Committee will abide by all state purchasing rules, as well as work with appropriate legal counsel in the review of the project and process.

It is anticipated that the resulting contract from the process will lower rates for telecommunications services in the State. However, there is a risk that this will not result in decreased expenditures for services as pent up demands are now able to be met using the same or a slight increase in dollars currently spent. This risk may be impossible to shield against.

BENEFITS REALIZED:

The vendor reaction to a prime contractor strategy as applied in several other states shows a high interest and a highly competitive bidding process. This can only result in more favorable aggregate pricing to the customers of the contract.

Under the prime contractor model, there is no explicit design assumed for the network. It is assumed that the bidders will use the most cost effective mix of technologies to be competitive and satisfy the users' requirements. The State does not "own" the network. By keeping the ownership of the network with private organizations, the State does not assume the burden of upgrades and maintenance.

Postalized rates will be requested for the catalog of services as a portion of this contract. It is anticipated that postalized rates will allow for the same services to be universally available in all parts of the state at the same cost.

With the aggregate users of the network providing the anchor tenant position for advanced services in the community, the prime contractor and the subcontractors will be afforded the opportunity to provide advanced services in communities to entities other than the those identified as eligible under the terms of the contract. This is seen as a benefit to the community as well as a potential piece of the solution to the issue of the digital divide.

The benefit identified above as a benefit to the community can also be identified as a benefit to the industry. As was experienced in the deployment of frame relay by the telecommunications industry in the state, the deployment of advanced services in underserved areas may require an initial investment. However, there is a potential for increased business for the prime contractor and subcontractors from entities beyond those identified in the contract.

The benefits of aggregation of services across the state can allow for the more efficient use of the existing infrastructure. Facilities that are currently stranded due to the inefficient use of the bandwidth can used in concert with identified need.

FINANCIAL BENEFITS:

Currently State Government for the State of Nebraska spends $3,295,44. for network services. If the state were to achieve a savings of 10%, the state alone would

save $329,544. However, other states have seen cost savings as high as 20%. These cost savings do not include the University, K-12 schools, or local government.

MILESTONES FOR IMPLEMENTATION:

The following represents the tentative milestones and dates for implementation of the Prime Contractor RFP and network.

- **11/6/00 (Monday)**
  Submit Business Implementation Plan for Approval—NITC.

- **11/15/00 (Wednesday)**
  Obtain Approval of Business Implementation Plan.

- **12/6/00 (Wednesday)**
  Initiate Coordination of RFP Development.

- **2/7/00 (Wednesday)**
  Review Technical/Financial/Legal/Other Portions of RFP and Modify, as appropriate.

- **3/1/01 (Thursday)**
  Finalize RFP Structure and Overview.

- **3/21/01 (Wednesday)**
  Finalize (Final) RFP Format.

- **4/4/01 (Wednesday)**
  Final RFP Draft Reviewed and Modified, as appropriate.

- **4/19/00 (Thursday)**
  Final RFP Draft Approval.

- **4/30/01 (Monday)**
  RFP Released

- **6/29/01 (Friday, 5:00 PM)**
  Replies to RFP Received, either via mail service—USPS (Regular, Registered, Certified, etc.), Overnight, etc., or hand-delivered by authorized representative, but no FAX or email.

- **8/20/01 (Monday)**
  Announcement of Selection of Prime Contractor and initiation of negotiations.

- **10/19/01 (Friday)**
  Finalize Negotiations with Prime.

- **12/3/01 (Monday)**
  Initial Implementation Phase of Network Installation Begins.

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[1] Digital Divide Network (2000). What Do We Mean When We Say 'Digital Divide?

http://www.digitaldividenetwork.org/tdd.adp